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EXAMINER

CHAWLA, JYOTI

ART UNIT

PAPER NUMBER

1794

NOTIFICATION DATE

DELIVERY MODE

06/02/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATENTS@BELLBOYD.COM

Office Action Summary	Application No. 10/622,115	Applicant(s) GROUX ET AL.	
	Examiner JYOTI CHAWLA	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-12 and 14-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 1,3-12 and 14-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 18, 2008 has been entered. Applicant has amended claims 1 and 12. Claims 1, 3-12, 14-17 are pending and examined in the application.

Claim Rejections - 35 USC § 112 (First paragraph)

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 2-12 and 14-17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Amendment to claims 1 and 12 dated 3/18/2008 adds "the milk product is room temperature stable for at least one month and does not need to be cooled to provide the foamed composition,". As claimed the milk product is stable at room temperature for at least one month, however, applicant's disclosure (Specification Page 4, lines 19-26) states "On storage, the product remains stable for months without any visible sign of physical instability. It is possible with the product of the invention to reach an overrun of 5 about 300% (reached by using whipping tools) and the foam obtained remained stable for more than 2 hours at room temperature." Also Page 2, line 33 of the disclosure states that "the product is whippable and thick at room temperature" which also does not disclose the storage temperature of the product as claimed. Thus as claimed, the storage of product at room temperature has not been disclosed. Further,

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foam stability for 2 hours is not the same as product stability for at least one month, as instantly claimed. Furthermore, it is not clear as to what is included in the term "room temperature stable" as recited in the rejected claims. Thus claims 1, 3-12 and 14-17 include subject matter that was not disclosed in a way to enable one of skill at the time of the invention to make or use the product with the recited characteristics.

Claim Rejections - 35 USC § 112 (Second paragraph)

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3-12 and 14-17 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 12 and 17 are indefinite for the recitation of "the milk product is room temperature stable for at least one month and does not need to be cooled to provide the foamed composition,". It is unclear as recited as to what is meant by "room temperature stable". The term "stable" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear whether the term "stable" refers to the stability of the composition to remain an emulsion at room temperature or the term "stable" refers to the microbial safety of the product upon storage at room temperature or "stable" refers to the is applied to the fat content of the product which does not get oxidized upon storage at room temperature. Clarification and /or correction is required.

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1) Claims 1, 5, 8, 10 and 11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Jonas (US 4,012,533).

Regarding claims 1 and 8, Jonas teaches of a milk product comprising 0-15% fat (claimed range 0-40%), 3-10% protein (i.e., non-fat solids, claimed range 5-23%), which includes non-fat dry milk (Column 5, lines 17-25, Column 5, lines 59-61), at least two emulsifiers (Column 6, lines 30-33), a stabilizer and water as instantly claimed.

Jonas teaches emulsifiers and combinations of emulsifiers including propylene glycol monostearate, mono and diglycerides, etc (Column 4, lines 22-34). Suitable stabilizers include alginates, carboxymethylcellulose, etc (Column 5, lines 2-6). Sodium alginate is utilized in a whipped milk based dessert as a stabilizer (Column 9, Table 1 and lines 45-46) as instantly claimed. Jonas teaches that the milk product does not exhibit syneresis or foam breakdown upon holding at room temperature for as long as 6 to 8 hours and exhibits the physical and organoleptic properties of whipped topping (Column 2, lines 60-65). Jonas also teaches of high temperature processing as recited in the newly added limitation to claim 1. Jonas teaches a pasteurizing step in making the milk product (Column 9 and Column 11, line 40), i.e., high temperature processing, as instantly claimed. Therefore, Jonas anticipates instantly claimed milk product.

Regarding the new limitation of unwhipped dessert or milk product being stable at room temperature, Jonas teaches that it is desirable to maintain the temperature of the admixture of fat and protein emulsion above gelation temperature of gum stabilizers, i.e., above 40°F, in order to make a emulsion with syneresis resistance and freeze-thaw stability when whipped dessert is made (Column 8, line 17-40). Jonas further teaches of combining fat and protein as emulsion at approximately 60°F (room temperature) prior to whipping (Column 9, lines 50-55). Since room temperature falls above the gelation temperature of the gum stabilizers, Jonas teaches that the unwhipped product is capable of being room temperature stable as recited. Regarding the newly added limitation that the milk product does not need to be cooled prior to providing the foamed

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composition, Jonas teaches that it is essential that whipping is carried out above the freezing temperature of the mixture (Column 8, lines 15-25). Jonas further teaches of combining fat and protein as emulsion at 60⁰F (room temperature) which can serve as feed for whipping (Column 9, lines 50-55). Thus the product as taught by Jonas does not need to be cooled prior to providing a foamed or whipped composition, as instantly claimed.

Alternatively, Jonas teaches of a milk product comprising fat and non-fat solids (proteins) in the range recited by the applicant, emulsifiers, stabilizers and water as recited by the applicant (see the rejection above). The applicant has neither defined what is considered to be "stable" nor specified the time for which the product is required to be stable at room temperature. Regarding the room temperature stability, Jonas teaches that the milk product does not exhibit syneresis or foam breakdown upon holding at room temperature for as long as 6 to 8 hours (Column 2, lines 60-65). Based on the teachings of Jonas and the recitation of the claim, it would have been obvious to one of ordinary skill at the time of the invention that the foamed milk product taught by Jonas, which does not show foam breakdown at room temperature for 6-8 hours, is a room temperature stable product as instantly claimed.

Jonas also teaches of high temperature processed food product by teaching pasteurization step in the processing of the milk product (Column 9 and Column 11, line 40). Claim 1 is directed to a product and as recited the applicant does not specifically claim when the milk based product is subjected to pasteurization or other heat treatment. It is noted that pasteurization, sterilization or UHT were known in the art at the time of the invention as methods of obtaining and ensuring microbial safety of foods for human consumption. Therefore, it would have been a matter of routine optimization for one of ordinary skill in the art at the time of the invention to subject the milk based product to a heat treatment, such as pasteurization, as late as possible in the processing of the milk product in order to make a product which is microbiologically safe for human consumption at the time of production and remains fit for human consumption during transportation and storage.

Note: Applicant is further referred to rejection of claims 1 and 12 under 112 (first and second paragraphs) made in the office action above.

Regarding claim 5 and 8, Jonas teaches of suitable emulsifiers including propylene glycol monostearate (Column 4 lines 22-34) that can be utilized at a range of 0.3 to 0.7% (Column 3 lines 40-45) as instantly claimed.

Regarding claim 10, Jonas teaches of non-dairy fat such as vegetable oils including soybean oil, palm oil, etc (Column 4 lines 1-5).

Regarding claim 11, Jonas teaches of additional ingredients in the milk product including flavorings, coloring agents, etc (Column 7 lines 36-38) as instantly claimed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

Determining the scope and contents of the prior art.
Ascertaining the differences between the prior art and the claims at issue.
Resolving the level of ordinary skill in the pertinent art.
Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

(A) Claims 3-4, 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jonas in view of Gonsalves et al (U.S. 6,033,711).

Jonas has been applied to claims 1, 5, 8 and 10 and 11 above.

The references and rejection are incorporated herein and as cited in the previous office action mailed November 1, 2007.

Regarding claim 3, Jonas teaches of stabilizers as sodium alginate and carboxymethylcellulose (CMC) in a whipped dessert in the amount of 0.26% which falls within the range recited by the applicant. Jonas, however, does not teach foam stabilizers comprising a mixture of microcrystalline cellulose and carboxymethylcellulose. However, Gonsalves et al teach a whipped product comprising 0.1 to 0.5% of gum stabilizers including microcrystalline cellulose and carboxymethylcellulose, alginates and mixtures thereof in order to provide structure to the foam (Column 3 lines 8-15) as instantly claimed. Thus stabilizers in the recited range of the applicant were known to be added to whippable or whipped compositions (Jonas and Gonsalves). Also the mixture of stabilizers including microcrystalline cellulose and carboxymethylcellulose was also known in the art (Gonsalves). Therefore, it would have been obvious to one of ordinary skill in the art to modify Jonas and utilize a mixture of microcrystalline cellulose and carboxymethylcellulose as taught by Gonsalves in order to get a combination of stabilizers that works well together to provide

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sustainable structure to the foam of the milk product, i.e., in order to provide a more stable foam.

Regarding claim 4, Jonas teaches of sodium alginate as stabilizer along with CMC, where the total amount of both stabilizers is 0.26% (Column 9, lines 45-46). The reference further teaches of sodium alginate in the amount of 0.1 % in a modified emulsion of example IV (Column 14, lines 1-10) which is included in applicant's recited range. Thus Jonas teaches of varying the amount of various stabilizers in the type of composition taught. Further, Gonsalves teaches that alginates are suitable stabilizers for whipped toppings. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the amount of sodium alginate as taught by Jonas in order to adjust the total amount of stabilizer in the whipped composition. One would have been further motivated to do so in order to effective amount of stabilizer to make a softer whipped topping without making the topping either too stiff or peaky or too soft.

Regarding claim 6, Jonas is silent about sorbitan tristearate as an emulsifier in a milk product. However, Gonsalves teaches of sorbitan tristearate at a range from 0.03 to 0.19% (Column 2 lines 52-53) in a milk product such as whipped topping. The reference also teaches that sorbitan tristearate is preferred in a milk product such as whipped topping because Sorbitan Tristearate acts as a fat crystal modifier in compound coatings and prevents crystal transformation and subsequent sandiness in spreads. Therefore, it would have been obvious to one of ordinary skill in the art to modify Jonas based on the teachings of Gonsalves by utilizing sorbitan tristearate as an emulsifier in order to provide a stable product with no fat crystal formation in the whipped composition.

Regarding claim 7, Jonas does not teach the wt% for unsaturated monoglyceride. However, Gonsalves teaches an emulsifier level of 0.1 to 0.5%. The emulsifying agents include monoglycerides of fatty acids (Column 2 lines 38-41), which falls within applicant's recited range. It would be obvious to one of ordinary skill in the art to modify Jonas in view of Gonsalves and specify the amount of monoglyceride utilized in the whipped composition in order to make a whipped or whippable product where the fat

and the protein components remain in an emulsion form in order to make a stable emulsion product.

(B) Claims 9 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jonas in view of Gonsalves further in view of Lynch (U.S. 5,759,609).

Jonas has been applied to claims 1, 5, 8 and 10 and 11 above. And Jonas in view of Gonsalves has been applied to claims 3-4 and 6-7 above.

The references and rejection are incorporated herein and as cited in the office action mailed November 1, 2007.

Regarding claim 9, Jonas discloses a milk product comprising 14-32% fat (Column 6 line 53) and sodium alginate (Column 9 line 46). However, Jonas failed to disclose 2.4% to 3% propylene glycol monostearate and 0.1% to 0.15% unsaturated monoglycerides. Gonsalves teaches an emulsifier level of 0.1 to 0.5%. The emulsifying agents include monoglycerides of fatty acids (Column 2 lines 38-41) as instantly claimed.

Lynch teaches a milk product comprising emulsifiers in the range of 0.05% to 5% (Column 4 lines 64-67). Suitable emulsifiers as taught by Lynch include propylene glycol monostearate (Column 5 lines 12-13), which encompasses applicant's recited range. Thus whipped toppings with instantly claimed emulsifiers, in the range recited, were known in the art at the time of the invention (Jonas, Gonsalves and Lynch). It would have been obvious to one of ordinary skill in the art to modify Jonas further based on the teachings from Lynch and Gonsalves and incorporate unsaturated monoglycerides and propylene glycol monostearate as emulsifiers, in order to provide a milk based whippable or foamable or whipped product that produces a stable foam when added to foods.

Regarding claims 12 and 14, Jonas discloses a method of forming a milk product comprising forming an emulsion containing sodium alginate as recited in claim 14, skim milk, carboxymethylcellulose, adding cream cheese in water (Column 11 lines 27-45). Jonas teaches a pasteurizing step in making the milk product (Column 11 line 40) as instantly claimed. However, Jonas is silent to the step of addition of sorbitan tristearate.

Gonsalves teaches suitable emulsifiers including sorbitan tristearate that can be utilized in a milk product. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Jonas and substitute any of the disclosed emulsifiers as taught by Gonsalves, in order to achieve a more stable foaming milk based product, as instantly claimed. Further, The claims call for the presence of emulsifier which is also Taught by Jonas (Column 4, lines 20-68). The process of addition of emulsifiers and stabilizers to foamable or whippable or whipped products was known at the time of the invention. The addition of same is not seen as a patentable distinction but merely an ingredient incorporated for it's own art recognized contribution of composition, for example, emulsifying fat in the composition and producing a stable foam. It would have been obvious to one having ordinary skill in the art at the time of the invention to have incorporated such ingredients as a matter of preference depending on, for example, availability, cost, desirable stiffness in the foam. New recipes for food involving the addition of common ingredients do not amount to invention merely because the coaction or cooperative relationship between the ingredients which produces new, unexpected, and useful function. In re Levin, 84 USPQ 232.

Jonas teaches a pasteurizing step in making the milk product (Column 11 line 40) as instantly claimed.

(C) Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jonas in view of Gonsalves further in view of the combination of Lynch (U.S. 5,759,609) and Thompson (U.S. 3,230,091).

Jonas has been applied to claims 1, 5, 8 and 10 and 11 above. And Jonas in view of Gonsalves has been applied to claims 3-4 and 6-7 above.

The references and rejection are incorporated herein and as cited in the office action mailed November 1, 2007.

Regarding claims 15-17, Jonas teaches that the milk product does not exhibit syneresis or foam breakdown upon holding at room temperature for as long as 6 to 8 hours and exhibits the physical and organoleptic properties of whipped topping (Column 2 lines 60-

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65). However, Jonas does not teach utilizing a foaming device. Thompson teaches milk products dispensed using aerosol cans in order to form smooth, shiny, foamy, etc milk products when dispensed (Column 1 lines 43-45, Column 2 lines 48-50). It was well known in the art to utilize aerosol cans to dispense milk products to form foams at the time of the invention. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Jonas further and utilize the foaming device as taught by Thompson in order to dispense a foamy milk product as instantly claimed.

(D) Claims 1, 3-8, 10-11, 15 and 17 are rejected under 35 U.S.C. 102(a) as being unpatentable over Staackmann (US 3,519,440) in view of Gonsalves (U.S. 6,033,711).

Regarding claim 1, Staackmann teaches a milk product for providing at room temperature, either by shaking or with a foaming device, a foamed composition for beverages and foods (Column 1, line 49 to Column 2, line 25), the milk product comprising 0 to 40% fat (not greater than about 12%, Column 2, lines 50-55), 5% to 23% non-fat solids (up to 6%, Column 2, Table 1), a mixture of at least two emulsifiers (Column 3, lines 5-10), a foam stabilizer, i.e., microcrystalline cellulose or Carboxymethylcellulose, (Column 4, lines 15-25), and water (Column 2, Table 1), the milk product is room temperature stable for at least one month and does not need to be cooled prior to providing the foamed composition (Column 4, lines 69-75), wherein the emulsifier is selected from the group consisting of propylene glycol monostearate (Column 3, lines 48-68), sorbitan tristearate, unsaturated monoglyceride and combinations thereof (Column 3, lines 5-12, 30-35 and 48-60), and wherein the foam stabilizer is selected from the group consisting of a sodium alginate (Column 4, lines 27-29), a mixture of microcrystalline cellulose and carboxymethylcellulose and combinations thereof (Column 4, lines 1-25).

Regarding the milk product being high temperature processed, i.e., processed at elevated temperatures as taught by Staackmann (Column 4, lines 45-50). Staackmann is silent about specifying the heat processing as pasteurization or sterilization or UHT

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treatment or a combination thereof. However, Staackmann teaches of elevated temperature processing (Column 4, lines 45-50) and also teaches of product stability to microbial attack without resorting to refrigeration (Column 2, lines 15-23), and the composition as taught by Staackmann is room temperature stable for more than one month (Column 4, lines 70-75). Thus high temperature processing to promote microbial safety of the milk product was known at the time of the invention as taught by Staackmann. Further pasteurization, sterilization UHT or combination methods were also known at the time of the invention as methods of heat treating milk products. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Staackmann and specify the elevated temperature processing step to be either pasteurization or sterilization or UHT or a combination in order to make a milk based foamable product that can be stored at room temperature for at least one month and still remain microbiologically safe for consumption.

Regarding claim 3, Staackmann teaches of stabilizers as sodium alginate and microcrystalline cellulose (MCC) in a whipped dessert in the amount of 1% which falls outside the range recited by the applicant. Staackmann, however, does not teach foam stabilizers comprising a mixture of microcrystalline cellulose and carboxymethylcellulose. However, Gonsalves et al teach a whipped product comprising 0.1 to 0.5% of gum stabilizers including microcrystalline cellulose and carboxymethylcellulose, alginates and mixtures thereof in order to provide structure to the foam (Column 3 lines 8-15) as instantly claimed. Thus stabilizers in the recited range of the applicant were known to be added to whippable or whipped compositions (Jonas and Gonsalves). Also the mixture of stabilizers including microcrystalline cellulose and carboxymethylcellulose was also known in the art (Gonsalves). Therefore, it would have been obvious to one of ordinary skill in the art to modify Staackmann and utilize a mixture of microcrystalline cellulose and carboxymethylcellulose as taught by Gonsalves in order to get a combination of stabilizers that works well together to provide sustainable structure to the foam of the milk product, i.e., in order to provide a more stable foam.

Regarding claim 4, Staackmann teaches a milk product comprising sodium alginate (algin) (Column 4, lines 28-34) on the recited range of 0.05% to 0.1%.

Regarding claim 5, Staackmann teaches a milk product of claim 1, comprising 0.3% to 3% propylene glycol monostearate (Column 3, lines 10-11 and 65-68).

Regarding claim 6, Staackmann teaches Regarding claim 6, Staackmann is silent about sorbitan tristearate as an emulsifier in a milk product. However, Gonsalves teaches of sorbitan tristearate at a range from 0.03 to 0.19% (Column 2 lines 52-53) in a milk product such as whipped topping. The reference also teaches that sorbitan tristearate is preferred in a milk product such as whipped topping because Sorbitan Tristearate acts as a fat crystal modifier in compound coatings and prevents crystal transformation and subsequent sandiness in spreads. Therefore, it would have been obvious to one of ordinary skill in the art to modify Staackmann based on the teachings of Gonsalves by utilizing sorbitan tristearate as an emulsifier in order to provide a stable product with no fat crystal formation in the whipped composition.

Regarding claim 7, Staackmann teaches a milk product of claim 1, comprising a mixture of saturated and unsaturated fatty acids (Column 3, lines 5-68) and mono and diglycerides in the amount of 0.1% (Column 5, composition A), which falls within 0.005% to 0.15% unsaturated monoglyceride as recited.

Regarding claims 6 and 8, Staackmann teaches a milk product comprising 0 to 25% fat (Column 2, lines 47-65), 0.3% to 0.9% propylene glycol monostearate (Column 5-6, Compositions A_D), carboxymethylcellulose, monocrystalline cellulose (Column 3, line 60-Column 4, line 25). Regarding sorbitan tristearate, Staackmann teaches that stearic acid is the most effective esterifying agent and Staackmann in view of Gonsalves teaches the recited range, As discussed in claim 6 above.

Staackmann teaches 0.1% unsaturated monoglyceride which is more than instantly claimed amount of 0.005% to 0.015%. However, Gonsalves teaches a combination of Polysorbate 60 and sorbitan monostearate (unsaturated monoglyceride) together in

0.14%. Thus it was known to modify the relative proportion of emulsifiers in the whippable or foamable compositions. Therefore, to modify one of the emulsifier amounts would have been a matter of routine determination for one of ordinary skill in the art at the time of the invention at least based on the cost, availability, storability and desired characteristics of the emulsifier. One of ordinary skill would have been further motivated to modify or adjust the amount of one of the emulsifiers in order to obtain a combination of emulsifiers that extend the storage life of the milk based composition.

Regarding claim 10 Staackmann teaches that the fat is a dairy fat, a non- dairy fat, or a mixture thereof (Column 2, lines 47-65).

Regarding claim 11 Staackmann teaches a milk product of claim 1, further comprising one or more of carbohydrates , i.e., starches (column 4, lines 23-25), mineral salts, colorants, or flavorings (Column 3, lines 1-15 and Columns 5-6 Compositions A-D), as recited.

Regarding claim 15, Staackmann teaches a process for producing a foam that is stable for at least 10 minutes which comprises forming a milk product by the method of claim 12 and forming a foam from the milk product by shaking or by using a foaming device (Column 1, line 68 to Column 2, line 24).

Regarding claim 17, Staackmann teaches a spray can (i.e., aerosol container) that contains the milk product of claim 1 and is capable of dispensing the product as a stable white foam (Column 1, lines 68-72 and Column 2, lines 7-10).

Response to Arguments

Applicant's arguments filed March 18, 2008 have been fully considered but they have not been found persuasive.

I) Applicant's arguments are based on the newly amended claims that have been responded in the office action above. Regarding the argument that Jonas fails to disclose or suggest every element of the amended claims (Remarks pages 5-6), has also been considered and responded to in the office action above.

II) In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "milk based foamed composition that remains stable *for a while* once poured or deposited onto the surface of a beverage, especially a hot beverage like coffee, tea or chocolate, and that acts simultaneously as a beverage whitener/foamer" Remarks, page 7) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Regarding applicant's remarks on page 5-7, about the claimed invention including "the milk product is room temperature stable for at least one month and does not need to be cooled to provide the foamed composition," has been responded to in the office action above and applicant is further referred to the rejection under 112 (first and second paragraphs).

III) Regarding applicant's argument that the references do not teach a product "that does not need to be cooled" it is noted that does not need to be cooled is not a positive recitation that the product is not cooled prior to providing the foamed composition. As recited, the claim does not exclude cooling, however merely suggests a property of the composition and since Jonas teaches a milk based composition that falls in applicant's recited range, therefore, it would be obvious that the composition as taught by Jonas would have temperature stability and processing characteristics that are similar to the instantly claimed invention, absent any clear and convincing evidence and or arguments to the contrary.

IV) Applicant's argument that Jonas fails to teach "room temperature stable milk product that provides a foamed composition" (Remarks, page 7, paragraphs 2-3) is not persuasive because Jonas teaches that the milk product does not exhibit syneresis or foam breakdown upon holding at room temperature for as long as 6 to 8 hours and exhibits the physical and organoleptic properties of whipped topping (Column 2, lines 60-65) as discussed in the office action above. It is noted that applicant's invention is stated as a "composition that remains stable for a while" (Remarks, page 7, paragraph 2) and Jonas teaches no foam disintegration or syneresis for 6-8 hours at room temperature, which falls in the range of "a while". Further it is noted that the applicant has not clarified the term "stable" and also the time period for which the composition remains stable, therefore the two terms have been given the broadest reasonable interpretation by the office. Thus Jonas teaches of room temperature stable foamed milk based composition as instantly claimed, absent any clear and convincing evidence and/or arguments to the contrary.

Therefore, applicant's arguments have been fully considered and have not been found persuasive and claims 1, 3-12, 14-17 have been rejected for the reasons of record.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jyoti Chawla whose telephone number is (571) 272-8212. The examiner can normally be reached on 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/KEITH D. HENDRICKS/
Supervisory Patent Examiner, Art Unit 1794

Jyoti Chawla
Examiner
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